HYPER-MINIATURE TOGGLE SWITCHES   FT

RoHS compliant

■ FEATURES

● It is of hyper-compact type. The volumetric ratio is half that of the conventional Series A.
● Immersion cleaning is possible after soldering.
● Terminal mounting is at 0.1-inch pitches.
● Independent detent mechanism provides light feel operability.
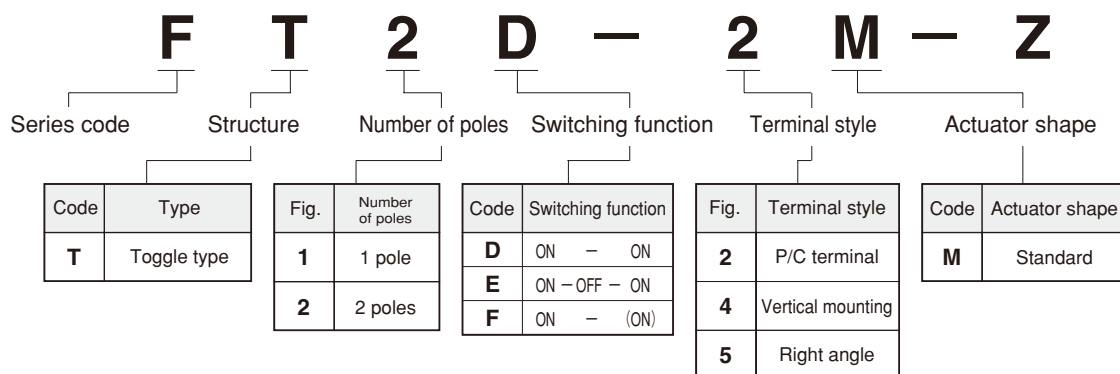● Regarding the contact reliability, a long-term stability is assured by the clip contact.

■ SPECIFICATIONS

Rating	Max.	28VDC 0.4VA max.
	Min.	1μA 20mVDC
Initial contact resistance		100mΩmax.　　(1.5mA 200 μVAC)
Dielectric strength		250VAC 1 minute
Insulation resistance		500MΩmin.　　　　　(250VDC)
Electrical life		10,000 cycles at max. rating, 50,000 cycles at min. rating.(**D,E** type) 30,000 cycles at min. rating.(**F** type)
Operating temperature range		－40～＋85℃
Storage temperature range		－40～＋85℃

■ PART NUMBERING

F T 2 D － 2 M － Z

Series code　Structure　Number of poles　Switching function　Terminal style　Actuator shape

Code	Type
T	Toggle type

Fig.	Number of poles
1	1 pole
2	2 poles

Code	Switching function
D	ON － ON
E	ON － OFF － ON
F	ON － (ON)

Fig.	Terminal style
2	P/C terminal
4	Vertical mounting
5	Right angle

Code	Actuator shape
M	Standard

■ TABLE OF PART NUMBERS

Number of poles	Switching function	P/C terminal	Vertical mounting	Right angle
1	ON - ON	FT1D-2M-Z	FT1D-4M-Z	FT1D-5M-Z
	ON - OFF - ON	FT1E-2M-Z	FT1E-4M-Z	☆FT1E-5M-Z
	ON - (ON)	☆FT1F-2M-Z	★FT1F-4M-Z	FT1F-5M-Z
2	ON - ON	FT2D-2M-Z	FT2D-4M-Z	FT2D-5M-Z
	ON - OFF - ON	FT2E-2M-Z	★FT2E-4M-Z	★FT2E-5M-Z
	ON - (ON)	☆FT2F-2M-Z	★FT2F-4M-Z	☆FT2F-5M-Z

☆ : Quasi-standard items.
★ : Made-to-order items.

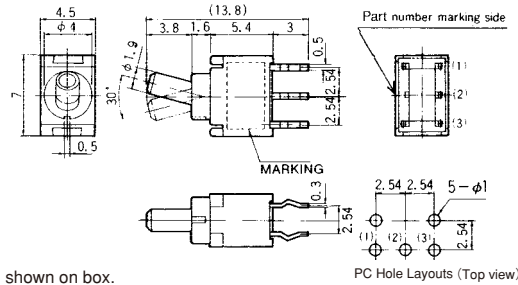※**Please contact us if you can't find your preferable combination in the table of part numbers.**

FT
HYPER-MINIATURE TOGGLE SWITCHES

■ OUTLINE DIMENSIONS

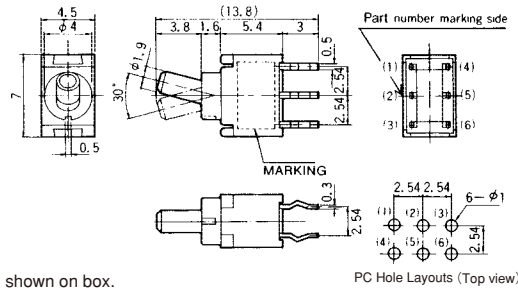### SPDT
PC

Terminal number not shown on box.

PC Hole Layouts (Top view)

Part No.	Switching function	Viewed from part No. marking side		
FT1D-2M-Z		ON	—	ON
FT1E-2M-Z		ON	OFF	ON
☆FT1F-2M-Z		(ON)	—	ON
Connecting terminals		2－1	—	2－3

DPDT
PC

Terminal number not shown on box.

PC Hole Layouts (Top view)

Part No.	Switching function	Viewed from part No. marking side		
FT2D-2M-Z		ON	—	ON
FT2E-2M-Z		ON	OFF	ON
☆FT2F-2M-Z		(ON)	—	ON
Connecting terminals		2－1 5－4	—	2－3 5－6

SPDT
R/A

Terminal number not shown on box.

PC Hole Layouts (Top view)
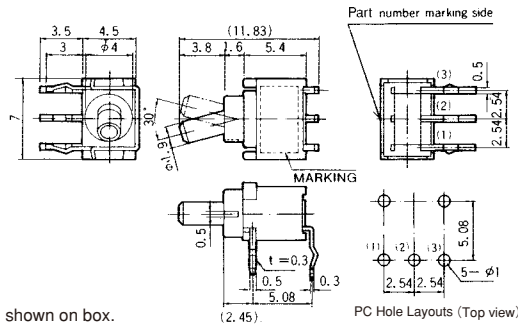
Part No.	Switching function	Viewed from part No. marking side		
FT1D-5M-Z		ON	—	ON
☆FT1E-5M-Z		ON	OFF	ON
FT1F-5M-Z		ON	—	(ON)
Connecting terminals		2－3	—	2－1

DPDT
R/A

Terminal number not shown on box.

PC Hole Layouts (Top view)
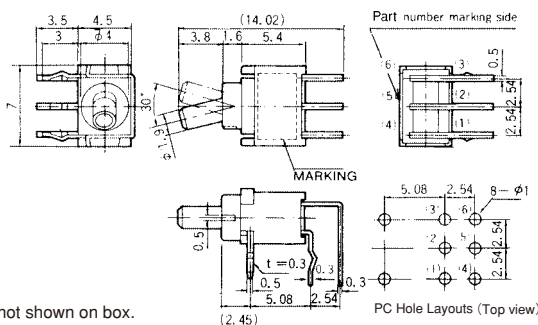
Part No.	Switching function	Viewed from part No. marking side		
FT2D-5M-Z		ON	—	ON
★FT2E-5M-Z		ON	OFF	ON
☆FT2F-5M-Z		ON	—	(ON)
Connecting terminals		2－3 5－6	—	2－1 5－4

(ON)：Momentary.
☆：Quasi-standard items
★：Made-to-order items.

Sept,
2007

■ OUTLINE DIMENSIONS

SPDT
V/M

Terminal number not shown on box.

PC Hole Layouts （Top view）

Part number marking side

Switching function / Part No.	Viewed from part No. marking side		
FT1D-4M-Z	ON	—	ON
FT1E-4M-Z	ON	OFF	ON
★FT1F-4M-Z	（ON）	—	ON
Connecting terminals	2—1	—	2—3

DPDT
V/M

Terminal number not shown on box.

PC Hole Layouts （Top view）

Part number marking side
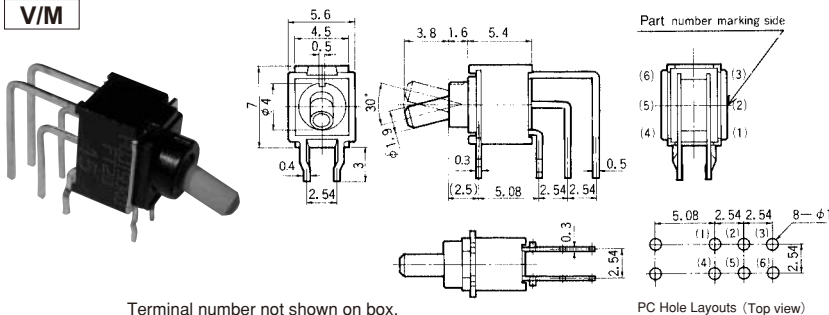
Switching function / Part No.	Viewed from part No. marking side		
FT2D-4M-Z	ON	—	ON
★FT2E-4M-Z	ON	OFF	ON
★FT2F-4M-Z	（ON）	—	ON
Connecting terminals	2—1 5—4	—	2—3 5—6

（ON）：Momentary.
★ : Made-to-order items.

■ SOLDERING

(1) Hand soldering
    Device : Solder iron.
    380 °C Max. 3 sec. Max.
(2) Auto soldering
    Device : Wave or dip type
    275 °C Max. 6 sec. Max.
    Preheat should be within 80-120 °C, 120sec.
(3) When soldering two or more terminals to the common land, use solder resist to solder them independently.

■ FLUX CLEANING

(1) Solvent : Fluorine or Alcohol type.
(2) Cleaning shall be made when terminal temperature falls to 90 °C or lower. Or, leave the switch at normal temperature for 5 minutes or longer, before cleaning.
(3) Do not apply ultrasonic cleaning.

■ PACKAGING SPECIFICATIONS

Plastick Pack
100 pcs/pack

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